POSITION DESCRIPTION (Please Read Instructions on the Back)										Agency Position No.     NL12087		
Redescription New Hdqtrs. X Field					mploying Office Location Orlando, FL		5. Duty Station Orlando, FL			6. OPM Certification No.		
					abor Standards Act		8. Financial Statements Required				9. Subject to IA Action	
					mpt No	nexempt	Executive Personnel Employment and Financial Disclosure Financial Interests			Yes	No	
Explanation (Snow any positions replaced)  10. Position Status							11. Position is: 12. Sensitivity			13. Competitive Level Code		
Competitive							Supervisory 1 - Non- Sensitive 3 - Critical Sensitive					
Excepted (Specify in Ren						marks)	Managerial				y Use	
SES (Gen.) SES							Neither 2 - Noncritical 4 - Special Sensitive					
15. Classified/Graded by Official Title of Position							Pay Plan	Occupational (	Code Grade	Initials	Date	
U.S. Office of Per- sonnel Management	?er- ement											
b. Department, Agency or Establishment	у											
c. Second Level Review												
d. First Level Review	Interdisciplinary Lead General/Computer/Electro Engineer/Computer Scientist					onics	GS	800/854/8 1550 (13		(2)	12/7/00	
e. Recommended by Supervisor or Initiating Office	Recommended by Supervisor or Initiating Office										<del>- 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 </del>	
16. Organizational Title of Position (It different from official title) Chief Engineer, Ground Virtual Simulation Systems Team (GVSST)							17. Name of Employee (if vacant, specify)					
						c. Third Subdivision Reserach, Development and Engineering Center (RDEC) (E)						
						d. Fourth Subdivision Virtual Simulation Systems (EV)						
b. Second Subdivision Simulation, Training and Instrumentation Command (STRICOM)						e. Fifth Subdivision						
Employee review - This is an accurate description of the major duties and responsibilities of my position.						Signature of Employee (optional)						
Supervisory Certification. I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the     Typed Name and Title of Immediate Supervisor						knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.  1. Typed Name and Title of Higher-Level Supervisor or Manager (optional)						
a. types realmed and time of immendant supervisor.  Edwin A. Trier, Director (Acting)  Research, Development and Engineering Center						typed vame and time of righter-Level supervisor or manager (optional)						
Signature						Signature Date					Date	
Jan 12hila												
classified/graded as required by Title 5, U.S. Code, in conformance with standards published by						22. Position Classification Standards Used in Classifying/Grading Position PCS for GS-854 Series, TS-83, Jan 88; PCS for GS-855 Series, TS-3, Feb 71; PCS for GS-1550 Series, TS-83, Jan 88; Handbook of Occpl Groups and Fam, Jan 99, HRCD-7; GS SG TS-52, Mar 81; GS Leader GEG, HRCD-5, Jun 98; Equip Dev GEG, TS-74, Jun 68						
James B. Godwin, Jr., COL, FA, Chief of Staff						Information for Employees. The standards, and information on their application, are available in the personnel office. The classification of the position may be reviewed and						
Signature Date 12/12/60							corrected by the agency or the U.S. Office of Personnel Management. Information on classification/job grading appeals, and complaints on exemption from FLSA, is available from the personnel office or the U.S. Office of Personnel Management.					
23. Position Review	Initia	als	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date	
a. Employee (optional	)											
b. Supervisor			-									
c. Classifier		i			I		i	;			i i	
24. Remarks Position is at the BUS: 8888 This is a Critical				C	CL:1491/1492/	1493/14	94				-	

## INTRODUCTION

Position is located in the Virtual Simulation Systems Business Area of the Simulation, Training and Instrumentation Command (STRICOM) Research, Development and Engineering Center (RDEC). STRICOM is a major subordinate command of the U.S. Army Materiel Command (AMC). The mission of STRICOM is to provide centralized management and direction for all research, development, acquisition and fielding of army training devices; simulations and simulators; major test instrumentation; targets and threat simulators; and distributed interactive simulations. The Commander centrally directs, coordinates and supports materiel development, acquisition and sustainment activities through the functional/matrix organization and four project managers.

Incumbent of this position serves as Chief Engineer for the Ground Virtual Simulation Systems Team within the Virtual Simulation Systems Business Area. As Chief Engineer of the Ground Virtual Simulation Systems Team, primary support is provided to the Project Manager for Combined Arms Tactical Trainers and Director, Operations and Support Directorate. The Ground Virtual Simulation Systems Team mission is to provide staff and systems engineering support to PM CATT and Ops Directorate, including programs and efforts which support the Ground Combat Tactical Trainers and Close Combat Tactical Trainer organizational entities. Focus is maintained on integrating activities within the business area to promote greater systems interoperability, seamless interplay and product reuse. Position requires coordination with the Commanding General, Deputy to the Commander, STRICOM Project Managers and Directors as well as higher headquarters, other AMC Commands, Training and Doctrine Command (TRADOC), other Army and DoD organizations and private industry.

### MAJOR DUTIES

Plans, organizes and directs engineering activities for the acquisition of ground virtual simulation systems. Through the application of engineering skills, incumbent is responsible for supporting and assisting the PM in defining system acquisition strategies and executing these strategies, ensuring that technical performance objectives are being satisfied within allocated cost and schedule. Develops and oversees the implementation of long range acquisition and life-cycle initiatives in conjunction with the PM team to insure all ground virtual assets realistically, accurately and successfully meet the training mission. In executing these acquisition strategies, the incumbent is responsible for 1) leading and directing team activities to resolve systemic technical issues of a complex nature; 2) identifying risks and developing risk mitigation plans to manage these risks; 3) leading and coordinating design and technical reviews; 4) coordinating the preparation and review of system designs; 5) managing the team in resolution of engineering problems and making final recommendations to the PM on controversial technical issues cutting across organizational and product lines; 6) coordinating the evaluation of the product quality applying scientific and engineering knowledge to analyze reports, tests results and operational issues, and directing team corrective actions as necessary; and 7) overall orchestrating the activities of engineering team members in the research, development, test, production and fielded support of products managed under the Ground Virtual Simulation Systems Team.

50%

The incumbent is responsible for ensuring activities support and are in consonance with STRICOM's mission and goals. The incumbent serves as the technical expert within the ground virtual domain, advising the PM with assessments of new capabilities and engineering practices that incorporate leading edge state of the art technology into systems development, while also advising on the efficacy of adopting these technologies considering life-cycle

cost and schedule implications. Incumbent must be an integral participant in promoting a culture of and seeking opportunities for horizontal integration and systems interoperability. In order to accomplish this, incumbent is expected to work and collaborate with the other Chief Engineers and RDEC Business Area Deputy Directors. This includes remaining cognizant of emerging technologies in the area of virtual simulations, helping to shape the investment strategy of the Simulation Technology Business Area relevant to the incumbent's product line concerns.

Supports initiatives to reduce stovepipe applications and seeks opportunities for multi-application platforms/systems in an interoperable environment of multiple systems, to include considerations beyond training applications such as simulation-based acquisition and embedded simulation. Coordinates with other AMC and Department of Defense (DOD) organizations on ground virtual simulation systems, and makes recommendations to the Command on ground virtual training initiatives that STRICOM should pursue.

Is recognized as the technical expert for the Command with regard to the virtual domain associated with ground systems and supports the Virtual Simulation System Business Area. Represents STRICOM and the PM at meetings and conferences with representatives of DA and DOD organizations, academia and private industry, demonstrating STRICOM's depth of expertise in the area of virtual simulation concerns. Collaborates with STRICOM matrix organizations and PMs to ensure the interests of the virtual domain are considered in all aspects of the Commands acquisitions, where applicable.

25%

Serves as the Chief Engineer for the Ground Virtual Simulation Systems Team within the Virtual Simulation Systems Business Area of the RDEC. Plans and coordinates the efforts of a team of engineering specialists. Provides technical direction and leadership including setting goals and objectives, planning for professional development, and allocating resources for project execution. Team Leadership responsibilities are itemized in attached checklist.

25%

Performs other duties as assigned.

# KNOWLEDGE REQUIRED BY THE POSITION

- A. Expertise with regard to the basic technologies and practices employed in the virtual simulation domain. This expertise is necessary to effectively direct STRICOM's ability to provide quality training which realistically and accurately trains the warfighter for optimum mission performance.
- B. Broad expertise in multiple engineering disciplines to include systems engineering; software development; system and software testing; quality assurance; reliability and maintainability engineering; configuration management; Information Security/Assurance; and system integration. Extensive knowledge and demonstrated expertise in applying current and evolving engineering technology required to perform market surveys, risk analysis, trade-off studies, and engineering cost estimates.
- C. Experience applying DoD materiel acquisition to support the virtual simulation life cycle engineering management processes. Specifically, apply the DoD 5000 series of regulations, AMC materiel acquisition practices, TRADOC requirements generation process, and STRICOM acquisition processes.
- D. Demonstrated leadership capabilities of engineering teams to include functional band activities as the lead engineer in teams supporting research and development, acquisition, fielding and lifecycle management initiatives.

Experience in interface control of systems integration into the field for training and mission support. Demonstrated capabilities to lead a team of multi-talented engineers to a successful completion of a project. Knowledge and understanding of projects and operations involving joint operations in complex environments and coordination capabilities with industry and multiple commands to successfully field products that meet the needs of all customers.

E. Ability to effectively communicate, both orally and in writing, to a wide range of audiences and issues relating to the acquisition, fielding and sustainment within the lifecycle support issues relating to STRICOM's virtual simulation initiatives. Ability to interact well with customers within and outside STRICOM, management and team members in order to insure the soldier in the field receives the best possible product for sustainment of mission in the field.

#### Classification Factors

### Factor 1. Assignment Characteristics

- Incumbent is the focal point for managing and directing the efforts of multiple engineering project teams in support of the acquisition, fielding and life cycle support of Ground Virtual Simulation Systems. Incumbent serves as an expert technical advisor providing leadership for the engineering concept formulation and development of large and complex virtual simulation systems. Advises project teams in evaluating advanced proposals to satisfy program objectives and in resolving critical and severe problems. Reviews and assesses overall progress of assigned efforts and coordinates the resolution of complex technical issues. Incumbent effectively estimates and coordinates engineering resource requirements to meet the technical objectives of assigned acquisition programs; these resource requirements usually span an extensive variety of specialty engineering skills (software, testing, facility, visual, safety, etc) needed to ensure successful fielding and life-cycle considerations of the virtual training products. Incumbent works closely with STRICOM Project Managers (PMs), other Army PMs, as well as STRICOM's Directorate for Operations and Support to identify engineering activities to be performed in execution of projects that can be in different life cycle phases involving research, development, production and/or operational efforts. In addition to responsibilities associated with executing assigned projects, incumbent is also responsible for leading team members towards ensuring interoperability of assigned systems with other modeling and simulation systems being developed by STRICOM under other PMs and business areas. Additionally, incumbent leads engineering teams towards effective horizontal integration and information sharing to leverage commonalties of systems within own business area as well as across RDEC business areas. Incumbent also provides critical input to the overall STRICOM technology development strategic plan, and effectively coordinates with RDEC technology program Chief Engineers to facilitate technology transition into current or future virtual simulation systems.
- b. The incumbent maintains cognizance of new and emerging modeling and simulation technologies relevant to virtual simulation systems. Incumbent must frequently develop new and innovative approaches to solve a variety of technical problems on assigned programs coordinating effectively with government and contractor personnel. As a recognized authority in relevant technology areas, incumbent must coordinate and direct efforts of industry, academia and DoD partners to address highly complex and difficult technical issues; ensuring seamless interoperability of live, virtual and constructive modeling and simulation systems that may be used to stimulate operational weapon systems. Incumbent advises engineers, scientists, logisticians,

analysts, contract specialists and private industry contractors on related state-of-the-art technologies and standards.

c. The success of the Ground Virtual Simulation Systems is critical to achieving overall Army training objectives especially through current transformation planning efforts. Virtual modeling and simulation in support of training objectives is a key technology area that is broadly applied across Army and DoD simulation and training systems. Successful accomplishment of objectives in this area would result in significant reductions in cost and turn-around time for virtual simulation system development and life cycle support. The product line alignment would also result in maximizing opportunities to leverage commonalties due to the focus on horizontal integration and interoperability, thus also reducing development risk.

### Factor 2. Level of Responsibility

- Incumbent works under general supervision of the Deputy Director for Virtual Simulation Systems. Incumbent exercises broad authority for technical decisions, planning and administering assigned responsibilities and managing resources. Responsible for planning, organizing, coordinating and reviewing engineering activities performed by team members on assigned projects. Works with team members and project directors to establish project objectives and resource requirements; identifies and allocates resources to ensure project requirements and objectives are met. Incumbent decides on courses of action based on expertise and technical input. Maximizes resources by developing collaborations among internal and external groups. Responsible for facilitating horizontal integration within the Virtual Simulation Systems Business Area, as well as across the other RDEC business areas to maximize investment efficiency and reuse opportunities, and to reduce technical and programmatic risk. Incumbent is delegated the authority to evaluate future technology trends as they apply to virtual modeling and simulation systems, and to influence the investment strategies of applicable RDEC technology programs. Recommendations made by the incumbent are accepted as authoritative. Work is reviewed in terms of overall effectiveness and attainment of objectives.
- b. Incumbent is a Chief Engineer leading engineers, scientists and related support personnel who are mostly in grades GS-12 and GS-13 and may reflect complex skill mix of engineering talents provided from other Government agencies and support service contractor labor pools. Plans work to be accomplished, sets and adjusts priorities, establishes milestones and schedules for completion of work. Assigns work, based on priorities and considering the difficulty and requirements of the assignment and the capabilities of team members. In cooperation with the Deputy Director for Virtual Simulation Systems, develops team member performance standards and makes formal and informal appraisal of work. Identifies developmental and training needs of team members.
- c. Contacts are with high level STRICOM and Army management, private industry contractors, academia, DoD and other professionals and experts in the Virtual Modeling and Simulation arena who are involved in generating requirements for and developing ground virtual simulation systems. Contacts are also with groups that can influence and guide the technology development efforts in the applicable technology areas. The purpose of contacts is to coordinate work efforts; resolve controversial questions and issues related to projects; monitor project progress; and negotiate for research, design, test and other engineering activities and resources. Additionally, contacts are also for purposes of partnering with industry, academia and DoD to effectively and efficiently address key challenges in the Virtual Modeling and Simulation area.

## Acquisition Corps Membership:

This is a Critical Acquisition Position. Unless specifically waived by the appropriate Army official, (i.e., the Director of Acquisition Career Management, the Army Acquisition Executive, or the Secretary of the Army) or the employee is "grandfathered" under 10 U.S.C. 1736 (c) (1), the following are statutorily mandated requirements (Reference: 10 U.S.C. 1733 and 1737):

- $\ensuremath{\text{(1)}}$  Selectee must be a member of an Acquisition Corps at the time of appointment.
- (2) Selectee must execute, as a condition of appointment, a written agreement to remain in Federal service in the position for at least three years. In signing such agreement, the employee does not forfeit any employment rights, nor does such agreement alter any other terms or conditions of employment.

Incumbent must be able to obtain and maintain a top secret clearance. Subject to drug testing IAW regulatory guidance.